

Gibbons Creek Watershed

Steigerwald Lake area

In the 1960s, a dike was built along the Columbia River to limit flooding and provide land for industrial development in Washougal. The resulting area, formerly the Columbia River flood plain, includes the Gibbons Creek elevated channel to the Columbia River, Steigerwald Lake, Steigerwald National Wildlife Refuge, and remnants of sloughs formerly connected to the Columbia River.

Steigerwald Lake is a shallow lake on the Columbia River flood plain. It nearly dries up each summer, then fills again during the winter months. Refuge managers use a series of canals and dikes to control lake levels to manage wildlife habitat and promote native wetland vegetation.

Most of Steigerwald Lake is within Steigerwald National Wildlife Refuge, which is more than 950 acres of river bottomland habitat — wetlands, riparian areas, grasslands, and hardwood forest. The refuge provides habitat for wintering waterfowl and year-round habitat for a wide variety of wildlife species. Wildlife can be viewed from State Highway 14 and Steigerwald Trail along the flood control dike.



Gibbons Creek Watershed
Stream Health 2003

| Stream Health Ratings | | Description | Land Cover Key |
|-----------------------|---|---|-----------------------------------|
| Excellent | ■ | Pristine, superior, or unsurpassed condition; minimal human disturbance | Forest |
| Good | ■ | Healthy enough to support aquatic life and recreation | Grass/Shrubs |
| Fair | ■ | Degraded but may support aquatic life and recreation | Residential/Recently cleared land |
| Poor | ■ | Inferior health, poorly suited for aquatic life and recreation | Commercial/Industrial |
| Very Poor | ■ | Severely degraded health; unsuitable for aquatic life or recreation | |
| Unassessed | ■ | No data collected | |
| Probable | ■ | Predicted stream health | |

Gibbons and Campen creeks

Gibbons Creek collects water from three similar tributaries, then passes through the east side of Washougal before flowing into the Columbia River flood plain. The upper part of the Gibbons Creek drainage is rural hilltops and forested valleys. Its westernmost tributary, Campen Creek, flows through the city of Washougal before it joins Gibbons Creek. Below State Road 14, Gibbons Creek is rerouted to an elevated channel built to aid salmon passage by making a direct route across the diked Columbia River flood plain. The elevated channel ends in a fish ladder that steps down from the flood control dike to the Columbia River.

The basin is 41 percent forest and 40 percent grass, fields, and shrubs. Developed areas and recently cleared land cover another 19 percent of Gibbons Creek's drainage area. Streamside trees provide cooling shade for most of Gibbons Creek, but there are sections that lack shade. This problem is most significant along Campen Creek as it passes through the city of Washougal and in the Gibbons Creek elevated channel.

Overall stream health is rated fair, but harmful bacteria have been an ongoing problem in Gibbons Creek. The upper reaches probably have fair to good health. Water temperatures measured by fisheries management agencies show that during the summer, Gibbons Creek water is also warmed as it travels across the elevated channel through Steigerwald Refuge. Campen Creek, which lacks shade along much of its length, also heats up considerably during warm summer days. These temperature problems make Gibbons Creek watershed streams less suitable as salmon habitat.

Management objectives for Gibbons Creek

- Protecting and improving stream health
- Meeting Washington Department of Ecology maximums for fecal bacteria in Gibbons Creek
- Finding and removing bacteria sources (such as livestock and septic systems)
- Keeping existing forestlands
- Reforesting unused farmland
- Keeping lot sizes large enough to absorb runoff from buildings and driveways
- Streamside tree planting to provide shade and cooling
- Utilizing residential construction methods that minimize runoff
- Requiring construction of stormwater control facilities in urbanizing areas